INNCON SOFTWARE

Sign Maker

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1984 by INNCON Technologies Inc.
P.O. BOX DD
Savoy, Illinois 61874
(217) 359-7154

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SIGN MAKER
VERSION A2.0
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USER MANUAL

USING INNCON SOFTWARE GRAPHICS

To begin using any of the software packages, place the INNCON Software program disk in disk drive 1 (drive A) and follow the instructions for your personal computer for booting the disk. The command for most Apple computers is PR#6.

The first menu displayed is the system menu. It allows you to run your INNCON software packages. In addition, this menu contains three other options:

⟨S⟩AVE HI-RES PLOT PROGRAM
⟨P⟩RINT HI-RES SCREEN
⟨B⟩OOT A DISK

This initial menu shall be refered to as the system menu throughout the INNCON documentation.

HI-RES PLOT PROGRAM OPTION

This option lets you save a program entitled "HI-RES PLOTTER" to one of your own DOS 3.3 disks. Running the HI-RES PLOTTER program allows you to load a chart, graph, or sign previously saved to disk by an INNCON Software program and display it on the hi-res screen. In addition, once a chart, graph, or sign is loaded, you can use your own software to dump hi-res page two to your printer and create a hard copy (paper copy) of the binary file containing the chart, graph, or sign to be displayed, after which, the hi-res page will be loaded and displayed. Striking any key will return you to the text mode, however, the hi-res page will remain intact. You may then perform the steps necessary to dump hi-res page 2 to your printer if you so desire.

A printing option is also available, which will print the hi-res screen. The software needed to print the hi-resolution graphics screen for the Apple computer is very complicated. If apple basic was used it would take approximately 15 minutes to print the screen. Thus, we have used a machine language program to print the screen. The code used to do this is available

in the SAVE HI-RES PLOT program for your modification. The routine we use to print the hi-res screen may need to be modified depending on the type of printer interface card and printer you have in your computer system.

The program provided will print hi-res page 2 on Epson printer using a Epson printer interface card.

BOOT A DISK OPTION

This option allows you to boot a disk in drive 1. Other than shutting off the power, this is the only means available for exiting the INNCON Software package.

INTRODUCTION

The Sign Maker graphics package is designed to create messages and signs on your personal computer. Various character sizes are provided to allow the user to create imaginative and attractive signs. The operation of the Sign Maker is very easy and takes little experience in computer programming. When choosing an option from the menus displayed in the Sign Maker package enter the character between the "〈" and "〉".

The Sign Maker superimposes the various character sizes over one another as a sign is created. IF large, medium, and small characters are desired on the sign, then 3 signs are actually created, one with large, one with medium, and one with small characters, and superimposed upon each other. The signs created on the monitor screen are medium resolution graphics images.

RUNNING THE SIGN MAKER PACKAGE

When entering the Sign Maker, the first screen displayed is the INNCON Software banner. To continue program execution, enter any key from the keyboard. The space bar is often a convenient choice.

〈1〉 EDIT OR CREATE DATA
〈2〉 DISPLAY A SIGN ON THE MONITOR
〈3〉 VIEW THE GRAPHICS SCREEN
〈4〉 CLEAR THE GRAPHICS SCREEN
〈5〉 BANNER
〈6〉 SAVE A SIGN ON DISK
〈7〉 RETURN TO SYSTEM MENU

The above menu is referred to as the main menu throughout this user manual. The following descriptions of options 1 through 7 describe in detail the commands available under each option. A Sign Maker tutorial is presented at the end of this manual to guide the user through the terminology and format used in our Sign Maker software.

*** IMPORTANT *** When creating a new sign, clear the graphics screen by entering a "4." If this is not performed, the sign that you will create will not be totally visible. The Sign Maker superimposes the various character sizes over one another as the sign is created. If large, medium, and small

characters are desired on the sign, then 3 signs are actually created and superimposed upon another. For this reason, the graphics screen is not cleared each time a new sign is made. The Sign Maker user must clear the screen before beginning each new sign.

OPTION 1 ⟨1⟩ EDIT OR CREATE DATA FOR A SIGN

To exercise this option, enter a "1." The monitor screen will clear and the data editor program will be loaded. The first screen displayed is the character size menu. The available options are:

⟨1⟩ REGULAR SIZE
⟨2⟩ MEDIUM SIZE
⟨3⟩ LARGE SIZE

Enter a "1," "2," or "3" depending on the size of characters desired.

The next entry determines the size of the sign. The number of rows and columns in the sign are entered. The number of rows and columns are restricted by the size of the characters selected.

After the sign dimensions are entered, the screen is cleared and a block appears whose row and column dimensions are equal to the values which you entered. Now you may enter the sign inside the block. The characters entered into the block will appear on the sign. During this editing mode, there are several commands provided to ease the editing of larger signs. These commands are:

CRTL-I	Move cursor up one row
CTRL-M	Move cursor down one row
CTRL-Q	Quit to main menu
CTRL-N	Erase the data entered for the sign
←	Left arrow. Moves one space left

CTRL-I,M and the left arrow move the cursor on the screen. CTRL-Q quits the data editor and returns program execution to the main menu. After the sign has been entered, this command returns you to the main menu where the display sign option is available. CTRL-N erases the data entered for the sign and resets the data editor. The following characters may be used to create any sign: #$%( )*'+ – ./123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ and ^.

OPTION 2 ⟨2⟩ DISPLAY A SIGN ON THE MONITOR

To exercise this option, enter a "2." This option takes the sign data entered using the data editor and places that data on the high resolution graphics screen. This option should not be used unless data has been entered using the edit or create data option.

When the sign has been drawn on the monitor, enter any key to return to the main menu.

OPTION 3 ⟨3⟩ VIEW THE GRAPHICS SCREEN

To exercise this option, enter a "V." This option displays the high resolution graphics screen. This will display any sign that has been created. After the sign has been displayed, enter any key to return to the main menu.

OPTION 4 ⟨4⟩ CLEAR THE GRAPHICS SCREEN

To exercise this option, enter a "C." This will clear the high resolution graphics screen. Any sign that was created and displayed on the screen is erased when this option is used.

OPTION 5 ⟨5⟩ BANNER

The BANNER option lets you use your 80 or 132 column printer to create three-line banners of up to 255 characters in length. The banner characters are adjustable in both height and width. In addition, the program has a provision for sending 'control characters' to your printer so that you can fully utilize your printers capabilities.

The program is entered by selecting the BANNER option from the main menu. Doing so will load the BANNER program and present the following BANNER menu on the screen:

⟨1⟩ CHANGE LETTER HEIGHT: 1
⟨2⟩ CHANGE LETTER WIDTH: 1
⟨3⟩ CHANGE PRINT TYPE: * ON
⟨4⟩ CHANGE # OF LINES: 1
⟨5⟩ CHANGE MESSAGE:
⟨6⟩ PRINT MESSAGE
⟨7⟩ CHANGE PRINTER COLUMNS: 80
⟨8⟩ RETURN TO MAIN MENU
ENTER CHOICE ⟶

In order to appreciate the menu selections, it is first necessary to present a brief discussion of how the BANNER program works. If you examine your computer monitor's screen, you will see that each character is created from an array of light 'dots' on a dark 'blank' background. The BANNER program creates characters using these same arrays, but the 'dots' shown represent specific printer characters. By default, the printer 'dot' block character is '*'. Similarly, the 'blanks' are created by printer characters which are by default ' '. The 'dots' and 'blanks' may, however, be changed to represent a variety of characters by the user, as explained below.

MENU OPTIONS

Option⟨1⟩ and ⟨2⟩: The size of the aforementioned 'dot' and 'blank' character blocks is adjustable through these menu options. Changing the

height and width of each dot in the banner character ultimately changes the banner character size, hence these options control character size.

Option⟨3⟩: Recall that the characters are created from 'dots' on a background of 'blanks.' This option lets you select what printer characters are used to create the 'dot' and 'blank' blocks. The default is '*' dots on ' ' blanks. In addition, this option lets you invert the print type. That is, when inversion is selected, the 'dots' are treated as 'blanks' and vice-versa. For example, under inversion, the default '* on' would print as ' ' dots on a '*' background.

Finally, this option lets you select the 'special' print type. The 'special' print creates each character in the banner out of 'dot' blocks created from that very character. For example, the banner letter 'A' would have dot blocks created from the printer character 'A.' The 'blank' character for the 'special' option is always ( ). Inversion can also be used with the 'special' print type.

Option ⟨4⟩: The number of lines in the banner can be changed through this option. The allowable values are 1, 2, or 3, with the default being 1. The number of lines affects the permissible letter height, so it may be necessary to reconsider Option ⟨1⟩ after changing the number lines in the banner.

Option ⟨5⟩: This option allows you to change the message that will be printed on the banner. When selected, this option will display the message contained on each banner line and then ask for a new message for each line. If it desired to leave the message on a particular line unchanged, simply hit the carriage return key. If the message is to be changed, type in the new message followed by a carriage return. Please note that editing is not available, so that it is necessary to retype a message to change it.

Also be aware that only the following characters are available for use: ABCDEFGHIJKLMNOPQRSTUVWXYZ 1234567890!@#$();:?⟨ ⟩ – = /.,

Option ⟨6⟩: This option allows you to print the message entered in Option 5 . Before printing, the opportunity is provided to change the printer parameters. One parameter that needs setting is line spacing. The appearance of the banner is best when the printer prints at 8 lines per inch. To accomplish this, it is necessary to send control codes to the printer. For the STAR GEMINI 10, the code is 'ESC O' which is equivalent to the ASCII code CHR$(27)+ CHR$(48). This is the default value. Consult your printer manual for the proper code for your printer. To change the current code, enter the new ASCII arguments in order. For example, to enter 'ESC 1' you would type in 27(cr)49(cr)(cr), where a (cr) denotes a carriage return. Simply hit (cr) if you do not wish to change the current values.

In addition, an option to send additional control code to the printer is provided. This permits setting the printer to print italics, double strike, enlarged print, etc. The procedure for entering this code is the same as for entering the 'lines per inch' code. The default additional code sent to the printer is none.

Once printer control codes have been set, they will remain at the new values until they are changed through this option or until the program is exited.

Option ⟨7⟩: This option allows the program to be set to operate with either 80 or 132 column printers. The default is 80 columns. If you condense the print on your 80 column printer to 132 columns via the additional code option in Option⟨5⟩, 132 columns should be selected for this option.

In addition, this option affects the permissible letter height, so it may be necessary to reconsider Option ⟨1⟩ after changing the number of printer columns.

Option ⟨8⟩: This option permits exiting the program. Upon returning, all of the parameters will be reset to their default values. This option will return you to the Sign Maker main menu.

If you have problems getting the banners to print, first make certain that the printer is on-line. Then check to see that the printer is selected as the "line printer" output device. See your DOS manual for additional help with this. Finally, check that the printer control characters entered through Option⟨6⟩ are correct.

OPTION 6 ⟨6⟩ SAVE A SIGN ON DISK

To exercise this option, enter a "S." The screen will clear and you will be asked to enter the filename you wish to call the sign you wish to save. After inputing the filename you will then input the disk drive number. Make sure that a disk is in the disk drive you selected. The sign will then be saved under the filename on the disk you selected.

OPTION 7 ⟨7⟩ RETURN TO SYSTEM MENU

To exercise this option, enter a "5." This will end the sign-making session and return you to the system menu encountered when the HELLO.BAS program was run.

PROCEDURE FOR CREATING SIGNS

STEP 1. Enter data editor. Choose character size.
Enter sign data.
STEP 2. Display sign using display sign option.
STEP 3. Repeat STEP 1 and 2 until all sign data is entered.

Follow the above steps to create any sign. If mistakes are made positioning sign data on the screen, you must start over with STEP 1.

SIGN MAKER TUTORIAL

To begin, select the Sign Maker option from the systems menu. The INNCON Technologies banner will appear and the instruction to enter any key will be displayed. Enter any key to continue. In doing so, the Sign Maker menu will be displayed. To begin, select Option ⟨1⟩, the "EDIT OR CREATE DATA FOR A SIGN" option.

The screen will clear, and the following menu will appear.

DATA EDITOR

ENTER SIZE OF CHARACTERS FOR THE SIGN

⟨1⟩ REGULAR SIZE
⟨2⟩ MEDIUM SIZE
⟨3⟩ LARGE SIZE
ENTER CHOICE →

This menu is used to select the character size for the sign. We will begin our example by selecting the large character size. Enter a "3." After the character size is entered the dimensions of the sign are entered. The maximum sign dimensions for each character size are shown on the screen, and the dimensions for the sign you are creating are entered. For our sign, we will have an x dimension of 2 and a y dimension of 4.

The entry of the sign dimensions are shown in Figure 1.

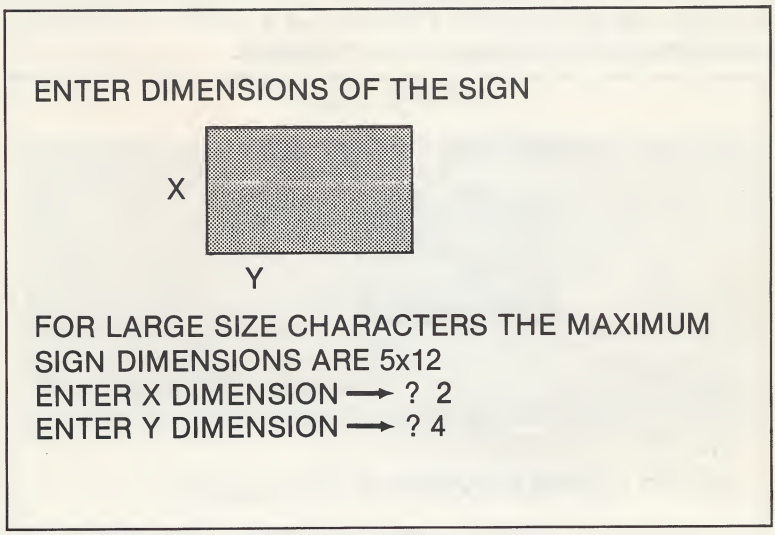
ENTER DIMENSIONS OF THE SIGN
X
Y
FOR LARGE SIZE CHARACTERS THE MAXIMUM
SIGN DIMENSIONS ARE 5x12
ENTER X DIMENSION → ? 2
ENTER Y DIMENSION → ? 4

FIGURE 1

After the sign dimensions are entered, the monitor screen will clear and the data editor will appear. The sign data (characters) are entered in the shaded block on the screen. The sign we are creating is shown on page 11. The large letters are entered in line 1 and "BIG." will appear on the screen, as in FIGURE 2.

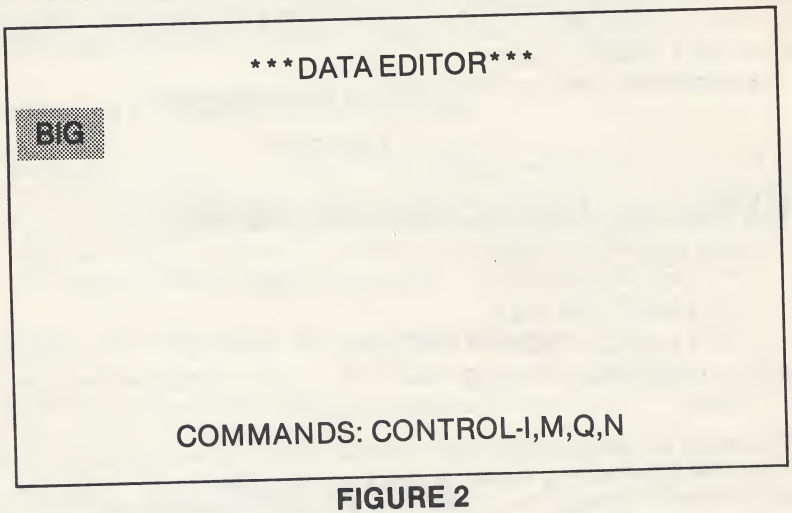

FIGURE 2

Once the characters have been entered, a CONTROL-Q is entered to exit the data editor. Each time a new character size is to be entered, the data editor must be re-entered. After the CONTROL-Q is entered, the Sign Maker menu will appear. Select Option ⟨1⟩ again. This time we will enter medium size characters for our sign.

Once the data editor is entered, select the medium size character option by entering a "2." The screen will clear and new sign dimensions will have to be entered. We will make the x dimension a 4 and the y dimension a 6. The sign dimension entrees are shown in Figure 3.

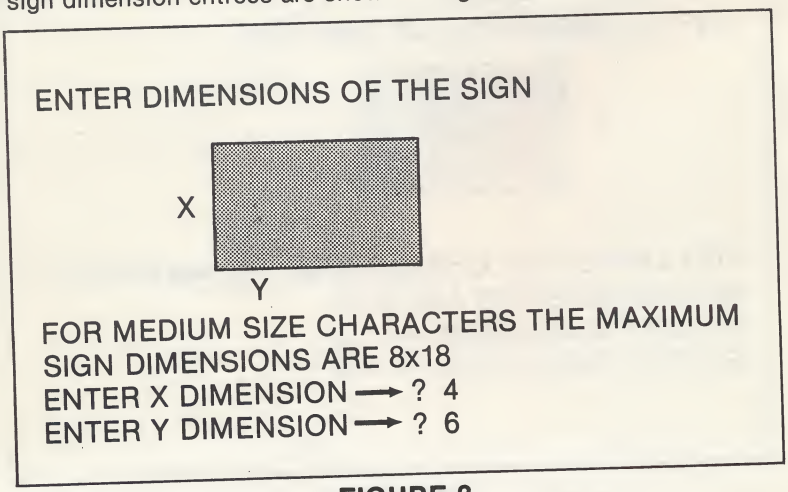
ENTER DIMENSIONS OF THE SIGN
X
Y
FOR MEDIUM SIZE CHARACTERS THE MAXIMUM
SIGN DIMENSIONS ARE 8x18
ENTER X DIMENSION → ? 4
ENTER Y DIMENSION → ? 6

FIGURE 3

After the dimensions are entered, the data editor will appear on the screen. The characters "MEDIUM" are to be entered on the 4th line. The CONTROL-M command will move the cursor to the 4th line. When the characters have been entered, the monitor screen should appear as in Figure 4.

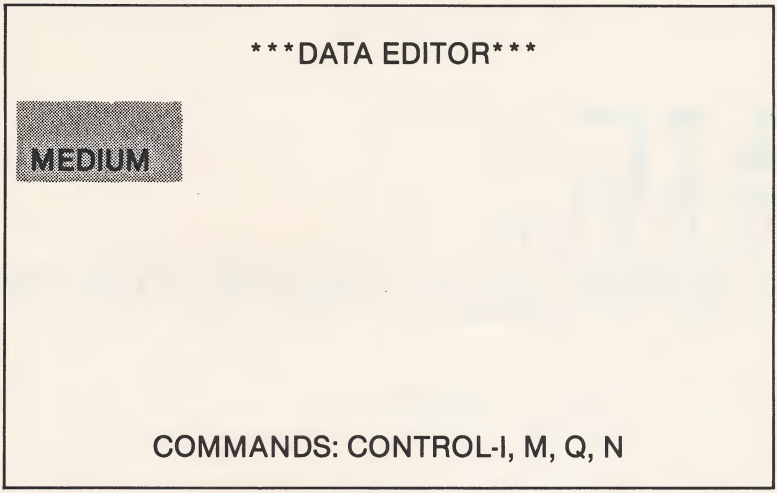

FIGURE 4

When the data editor is reselected, the regular size characters are to be selected. The sign dimensions are to be x = 18 and y = 39. These are the maximum values for their character size. When the data editor screen is ready, enter the character data shown in Figure 5. The first line of data begins with line 10. Use the CONTROL-M command to move the cursor to line 10 and then enter the data shown in Figure 5. After this data has been entered enter a control-Q to exit the data editor.

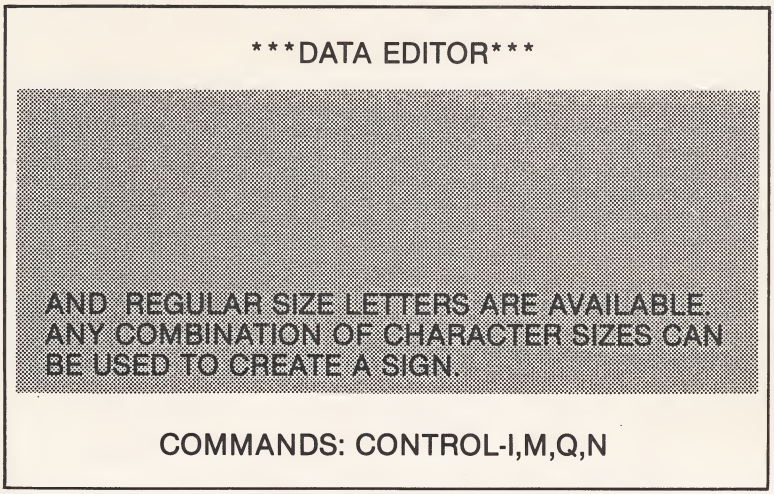
DATA EDITOR
AND REGULAR SIZE LETTERS ARE AVAILABLE.
ANY COMBINATION OF CHARACTER SIZES CAN
BE USED TO CREATE A SIGN.
COMMANDS: CONTROL-I,M,Q,N

FIGURE 5

We will now create the sign, which we have just entered into the data editor. Select Option ⟨2⟩ from the Sign Maker menu to display a sign on the monitor. After this option is selected the sign displayed on the screen will appear as the sign below.

Example Sign